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United States Patent [19]

Aizawa et al.

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[54] **LUMINESCENCE BY REACTING
AN ACRIDINIUM ESTER WITH
SUPEROXIDE**

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435/968; 422/82.07; 422/82.08; 436/800;
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[58] **Field of Search** 422/82.07, 82.08;
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[57] **ABSTRACT**

A light emitting method of an acridinium ester, comprising
reacting said acridinium ester and a superoxide anion, and a
method of detecting a substance to be examined, comprising
detecting a light emitted by reacting a superoxide anion with
an acridinium ester used as a label are described. It is
possible to carry out the reaction not under strongly alkaline
conditions but around the neutral point and to generate
strong luminescence which is stable over a long period of
time.

7 Claims, 4 Drawing Sheets